



Norman H. Bangerter

Governor

Kenneth L. Alkema

Executive Director

Don A. Ostler, P.E.

Director

State of Utah  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY

288 North 1460 West  
P.O. Box 144870  
Salt Lake City, Utah 84114-4870  
(801) 538-6146  
(801) 538-6016 Fax

DOGM  
MINERALS PROGRAM  
FILE COPY

July 15, 1992

CERTIFIED MAIL

(Return Receipt Requested)

Mr. Larry Drew, Manager  
Hecla Mining Company  
Box C-8000  
Coeur d'Alene, Idaho 83814-1931

RE: Draft Consent Agreement  
Escalante Tailing Pond

Dear Mr. Drew:

The required date, July 1, 1992, has passed for Hecla to meet the call for a ground water discharge permit for the Escalante tailings pond west of Cedar City, Utah. Please be advised that the Division believes a CONSENT AGREEMENT remains a viable option for settling this issue as suggested in your April 27, 1992 letter. You will note it will be necessary for us to initiate appropriate compliance action should this not proceed in a timely manner. The enclosed draft agreement includes, among other requirements, monitoring, the drilling and logging of an additional monitoring point, and aquifer tests to determine the ground water flow rate. Also, the required monitoring period for Hecla will be established by the calculated flow rate from the far side of the pond to the monitoring wells, or a minimum of five years, whichever is greater.

Please examine the draft agreement and advise us with your comments within 30 days. You may call Mack Croft or Larry Mize at 801-538-6146 if you have questions.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E.  
Executive Secretary

Enclosure  
DAO:MC:gt

cc: Wayne Thomas, District Engineer  
Division of Oil, Gas, & Mining

Q:HECLA/CONSENT.LTR:  
FILE:

RECEIVED

JUL 21 1992

DIVISION OF  
OIL GAS & MINING

**DRAFT**

BEFORE THE UTAH WATER QUALITY BOARD

--oo0oo--

In the Matter of:                 :

Hecla Mining Company,         :

Incorporated                     :

--oo0oo--

This STIPULATION AND CONSENT AGREEMENT (herein after "AGREEMENT") is entered into by the Utah Water Quality Board (the "Board") representing the State of Utah (the "State") pursuant to the Utah Water Quality Act (the "Act"); Section 19-5-101 et seq., Utah Code Annotated, 1953 as amended, and Hecla Mining Company ("Hecla"), for the purpose of addressing ground water quality issues regarding the Escalante Mine operations in Iron County, Utah.

## STIPULATION

1. The parties agree that the Board has jurisdiction over this matter.
2. Hecla Mining Company, Incorporated (hereinafter Hecla), is an Idaho corporation, licensed to operate in Utah, and operates the Escalante Mine, located about ten miles west of Newcastle, Iron County, Utah.
3. Hecla purchased the mine and processing plant from Ranchers Exploration and Development Corporation (Redco Silver), who developed the property in 1980.
4. Silver ore from the Escalante Mine and from adjoining areas was processed with cyanide solutions at a plant located at the mine site. Fine tailings from the plant were discharged to a 58-acre tailings pond from 1981 to August 1990. All operations ceased in 1990, and Hecla now desires to reclaim the site.
5. The mine site is defined as an existing facility under the Ground Water Quality Protection Regulation UAC R317-6-1.12. The Executive Secretary of the Water Quality Board, as provided in UAC R317-6-6.1.B, requested a ground water permit for the site January 31, 1991, after review of information submitted by Hecla. Hecla objects to the need for a permit.
6. The parties now desire to resolve this matter without further admissions or judicial proceedings except to the extent provided below by entering into this AGREEMENT. This AGREEMENT is in lieu of the requirements of a ground water discharge permit.
7. For the purpose of this AGREEMENT the parties agree and stipulate to the above stated facts. None of the stipulations related herein shall be considered admissions by any person related or unrelated to this AGREEMENT for purposes other than determining the basis of this AGREEMENT.

## AGREEMENT

1. To protect and preserve the existing ground water quality in the area of the Hecla facility against potential contamination, Hecla and the Board have entered into this agreement which stipulates that the parties will fulfill the obligations outlined below.
2. Hecla shall submit, within 30 days of the effective date of this AGREEMENT, a detailed ground water monitoring and sampling plan. This plan shall include but is not limited to the following items.
  - a. A description of the existing monitoring well network that may be used as compliance points for this AGREEMENT. The description shall include surveyed well locations and available well logs.
  - b. A quarterly monitoring and reporting schedule which describes the monitoring to be conducted with due dates of April 15, July 15, October 15, and January 15 for submission of monitoring reports.
    - i. During the initial year of monitoring, sample collection shall be monthly and reported quarterly for the metals listed in Table 1 UAC R317-6 and the following parameters:

Specific Conductance  
Sodium (Na)  
Potassium (K)  
Magnesium (Mg)  
Sulfate (So<sub>4</sub>)  
Calcium (Ca)  
Bicarbonate (HCO<sub>3</sub>)  
Nitrate as N  
Chloride (Cl)  
Cyanide (Free)  
Cyanide (Total)  
Total Dissolved Solids (TDS)  
Temperature  
pH

- ii. During subsequent years, the sample collection shall be quarterly and reported quarterly for the following:

Total Dissolved Solids (TDS)  
pH  
Cyanide (Total)  
Cyanide (Free)

Nitrate as N  
pH

- c. All monitoring events including ground water level measurements, sampling, handling and analysis shall conform to the requirements of the RCRA Technical Enforcement Guidance Manual (1986).
  - d. A listing of the proposed analysis methods, and detection limits for the above specified parameters.
- 3. Hecla shall submit within 60 days of the effective date of this AGREEMENT plans for drilling of a minimum of one additional downgradient monitoring well. Hecla shall submit the following information within 120 days of well completion. The new well is to be added to the monitoring list discussed in Paragraph 2.a.
  - a. Geophysical and drillers logs, of the new additional downgradient monitoring well and geophysical logs of the existing monitor wells. Where practical the logs are to include neutron, gamma, resistivity and SP curves.
  - b. Water level and aquifer parameter data from the new well to be obtained with an aquifer test.
  - c. Water quality data from the new well. The parameters monitored for will be those in Paragraph in 2.b.i.
  - d. Road cut or pit exposures dug with a backhoe may be required after well logs have been examined.
- 4. Hecla shall also submit, within 120 days of the date of well completion a proposal for calculating the ground water flow rate and time of contaminant travel, from the base of the pond clay liner at the far side of the tailings pond to the monitoring wells, including a complete description of ground modeling techniques and input parameters.
- 5. Hecla shall submit within 120 days of well completion the following:
  - a. A hydrogeologic description and cross sections of the subsurface deposits below the tailings pond;
  - b. an updated water table map of a 45-square-mile area of the mine area and the valley area on the east. An additional water level map may be required at the end of five (5) years if water level data from wells indicate a substantial change in water levels has occurred during the ensuing period.
- 6. The Executive Secretary shall review the monitoring and sampling plans, the calculated ground water flow rate, the maps, or revisions thereto, and notify Hecla of his approval or disapproval. In the event of any disapproval, the Executive Secretary shall specify the

deficiencies in writing. Within 45 calendar days of receipt of written deficiencies, Hecla shall submit revised monitoring and sampling plans, calculations, and maps that corrects the specified deficiencies. Upon approval of the plans by the Executive Secretary, Hecla shall execute the monitoring and sampling plan, or reconstruct maps or reduce calculations in accordance with the methods and time frames specified therein.

7. The monthly ground water monitoring will be used by the Executive Secretary to establish ground water classification, background concentrations and protection levels. For the purpose of this AGREEMENT, "contamination of the aquifer" shall be defined as an exceedance of the established protection levels.
8. Hecla is required to monitor for the flow rate period approved by the Executive Secretary in paragraph 4, or for a period of five years from the effective date of this agreement, whichever is greatest. 1990 the year of pond closure, will be considered the beginning of the flow rate period.

If contamination of the aquifer resulting from the tailings pond occurs at any time during the implementation of the required ground water monitoring plan, Hecla shall submit within 60 days of receipt of a written notice from the Executive Secretary a Remedial Action Schedule. This schedule shall address the actions Hecla will take to remediate the aquifer below and near their facility. This schedule shall include, as determined appropriate by the Executive Secretary, but is not limited to, a time table for the completion of the following items: 1) selection of consultant services; 2) the development of risk-based action concentrations; 3) a contamination investigation (plume delineation); 4) a corrective action study; and, 5) a corrective action plan. Upon approval of a Remedial Action Schedule, Hecla will be required to undertake the necessary actions to meet this schedule. During the execution of the Remedial Action Schedule the Executive Secretary may require the submittal and/or approval of the resultant reports, plans and specifications.

The Executive Secretary shall review the required submissions or revisions thereto, and notify Hecla of its approval or disapproval. In the event of any disapproval, the Executive Secretary shall specify the deficiencies in writing. Within 30 calendar days of receipt of written deficiencies, Hecla shall submit a revised report, plan or specification that corrects the specified deficiencies. If the deficiencies are minor or if the deficiencies cannot be remedied within the required 30 days, the Executive Secretary may revise, by written notice, the 30 day requirement to shorten or lengthen this period as appropriate.

9. Hecla shall pay the following stipulated penalties in the event that Hecla fails to meet the deadlines for each plan, report, deficiency response thereto:

Submission of Monitoring and Sampling Plan	\$100.00_____per day
Submission of Remedial Action Schedule	\$200.00_____per day
Submission of Monitoring Reports	\$100.00_____per day
Submission of Reports, Plans or Specifications	
Required in the Approved Remedial Action Schedule	\$200.00_____per day

Amounts payable under this provision will be paid to the State of Utah by check delivered to the Division of Water Quality, 288 North 1460 West, Salt Lake City, Utah 84114, within 30 days of notice from the Executive Secretary that a deadline has been exceeded.

Hecla may petition the Executive Secretary for extension of any deadline imposed by this AGREEMENT for reasonable cause prior to the deadline. The Executive Secretary shall evaluate the petition and either grant an extension or deny it. Hecla may appeal any denied extension to the Water Quality Board within ten days of receipt of denial. In the event of denial of a requested extension, the Board may impose or modify the penalties stipulated in this paragraph.

10. If contamination of the aquifer as defined in Paragraph 8 above does not occur, and if after the approved monitoring period, the ground water monitoring required in this AGREEMENT do not indicate the presence of constituents in the aquifer, then the AGREEMENT shall be considered complete and fulfilled, and Hecla will not be required to undertake or submit further monitoring or analytical results.
11. Nothing in this AGREEMENT shall constitute or be construed as a waiver by the State of its right to renew a call for a ground water permit, to initiate enforcement action, including civil penalties, against Hecla in the event of future noncompliance with the Utah Water Quality Act, nor shall the State be precluded in any way from taking appropriate action to renew a call for a permit, to abate an imminent endangerment to public health or the environment should such a situation arise at Hecla's facilities. Nothing in this AGREEMENT shall constitute or be construed as a release from any claim, to include natural resource claims, cause of action, or demand in law or equity which the State and Hecla may have against each other or any person, firm, partnership, or corporate liability arising out of or relating in any way to the release of pollutants to waters of the State.
12. This AGREEMENT expressly contemplates submission of certain plans, proposals, data and reports by Hecla to the Executive Secretary for his review and approval. Where opportunity for review and approval is provided, Hecla shall not proceed with the proposed activity unless and until approvals have been received. If agreement by Hecla and the Executive Secretary cannot be reached regarding any plan, proposal or report under this AGREEMENT, Hecla or the Executive Secretary may commence a declaratory order proceeding under the Utah Administrative Procedures Act and applicable regulations of the Board to resolve the disputed plan, proposal or report. The Board's decision in any adjudicative proceeding shall constitute final agency action and be subject to judicial review under applicable state law.
13. Hecla's failure to meet or satisfy any requirements set out in this CONSENT AGREEMENT shall be excused for a reasonable time to the extent the failure is caused by events beyond Hecla's control, including without limitation acts of God, public enemy, unforeseen strikes or work stoppages, fire, explosion, flood, tornado, earthquake, lightning, riot, sabotage or war.

**DRAFT**

This CONSENT AGREEMENT shall become effective upon execution by Hecla and the Executive Secretary of Utah Water Quality Board.

DATED this \_\_\_\_ day of \_\_\_\_\_, 1992.

Hecla Mining Company, Incorporated

Utah Water Quality Board

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Don A. Ostler, P.E.  
Executive Secretary



**DRAFT**

## **Hecla Consent Agreement**

Executed \_\_\_\_\_.

Provides for minimum 5-year monitoring period of the aquifer beneath the site to insure early detection of any contamination from the tailings pond.

Agreement provides for drilling and logging an additional monitoring well.

Agreement insures that the issues will be quickly addressed if contamination in excess of protective levels is detected.

Sampling QA/QC Plan is required in Agreement.

### **Justification:**

The tailings pond contains more than 100 mg/kg cyanide and other metals.

The tailings consist of fine impermeable deposits that are not economically remedial and treatment is impractical.